

THE AIR FORCE RESPONSE TO THE CUBAN CRISIS

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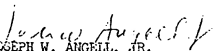
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Preface

The following highly condensed summary of Air Force actions during the Cuban Crisis and depiction--within the tabs--of strengths and weaknesses revealed therein, was prepared, at the request of the Office of the Vice Chief of Staff, USAF, for use by the Chief and Vice Chief of Staff, key deputies, and major air commanders most directly involved in Cuban Crisis actions.

The narrative summary is based primarily on data furnished to the USAF Historical Division (AFCHO) by Air Staff agencies during the crisis (reference: AFCCS Letter No. 01, 23 October 1962, subj: Documentation of the Current Contingency). The tabs, which contain summaries of the most significant lessons learned from the crisis principally by the major combat and combat support commands, derive from data furnished by major command historians for inclusion in this paper. In the majority of instances the command assessments of Cuban Crisis actions are based on the historian's personal interview, for this purpose, with the commander. In all instances, the findings presented within the tabs are based on immediate Cuban Crisis experience, as viewed and interpreted by responsible key staff officers who made their immediate post-crisis evaluations readily available to the historians. With one exception, the commands furnished this data to AFCHO by 6 December 1962, in order that the paper could be available for use by mid-December. Publication was delayed, however, until data had been received from all commands, in order to make the paper properly inclusive.

Although certain Air Force commands felt only minor impact from the Cuban Crisis, the tabs cover every major command, on the premise that the paper, as an entity, should reflect the entire response of the Air Force to the crisis.


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THE AIR FORCE RESPONSE TO THE CUBAN CRISIS

14 October-24 November 1962

Introduction: This summary is primarily concerned with a review of the specific Air Force strategic and tactical response during the Cuban crisis of October-November 1962. However, it should be noted that many USAF actions already were underway prior to the discovery that the Soviet Union was emplacing ballistic missiles in Cuba. These actions were initiated by the Air Force as part of the DOD response to the deteriorating relationship with Cuba, highlighted in the summer of 1962 by the arrival on the island of several thousand Soviet military personnel and increased amounts of war materiel.

Between April and October 1962 Air Force agencies discussed and documented materiel requirements to support CINCLANT's Oplans 312, 314, and 316, and initiated action to preposition quantities of war consumables at Homestead and MacDill AFB's in Florida and other sites in the southeastern United States. MATS airlift capability was reviewed, operational rates were accelerated, and C-124 formation drop training was stepped up in response to the demands of Oplan 316. Also, Air Force surveillance of Cuba was increased, and by 26 September resulted in identification of 11 Soviet SA-2 sites, various MIG aircraft deployments, Russian electronic equipment, and other military gear. Thus, the advent of the crisis--triggered by perhaps the most important USAF reconnaissance flight in American history--found the Air Force in a somewhat advanced posture to support the Cuban contingency.

Establishing a Cuban Alert

On 14 October a SAC U-2 aircraft brought in the first photographic evidence of Soviet medium-range ballistic missile sites in Cuba.¹ Other Air Force reconnaissance flights confirmed this discovery, and revealed the presence of Soviet II-28 jet bombers on the island.² The President was informed of the photographic evidence the morning of 16 October.

The next day the Secretary of Defense met with the Service Secretaries, a special JCS meeting was held, and CINCLANT briefed Army, Navy, and Marine commanders on the air phases of CINCLANT Oplans.³ On 17 October CINCLANT dispatched instructions on prepositioning aircraft, materiel, and personnel at MacDill, Homestead, and McCoy AFB's and at Key West NAS. Priorities were established for implementing parts of the USAF Short Range Requirements Plan and the USAF War Plan was revised accordingly.⁴

In compliance with a JCS message of 22 October, USAF commands were placed on DEFCON 3 effective 2300Z. CINCSAC directed implementation of a one-eighth airborne alert of the B-52 force; by the following day the airborne alert was in full operation on both the North and South routes.* Also on 22 October, under JCS direction, CINCSAC ordered the dispersal of 183 second cycle B-47's to 33 (later 32) civilian and military airfields⁵ and ADC dispersed 161 aircraft to 16 bases in nine hours.⁴ All dispersed ADC aircraft were armed with nuclear weapons for the first time.⁶ Prior to the President's speech to the nation on 22 October, 22 interceptors were airborne as a precautionary measure in the event of a rash Cuban action.⁷

When the crisis began, USAF air defense forces in the southeast consisted of 4 F-102's at Homestead AFB, 6 RC-121's at McCoy AFB, and two interceptors on alert at Tyndall AFB. Between 19 and 21 October air defenses in Florida were bolstered by the addition of 26 F-102's at Homestead, 24 F-106's at Patrick, and 6 RC-121's at McCoy.⁸ In addition, CONAD requested eight more Hawk battalions and a number of 40-mm units to provide low altitude defenses for bases and cities in the area.⁹

Deployment of tactical units, equipped with F-100's, F-105's, RF-101's, KB-50's, and RB-66's, to Florida began on 20 October. By 22 October all TAC combat forces, support personnel, equipment, and the minimum munitions required were in place. Of the 623 aircraft in the AFLANT force, 163 were stationed at their home bases while the balance were in Florida. The total

*While operating at peak strength during the crisis, approximately 65 airborne B-52's were "target effective" at any give time.

⁴The total COMAB dispersed force involved 173 aircraft at 17 bases.

force included 511 fighters, 72 reconnaissance aircraft, and 40 tankers.¹⁰

USAF airlift was increased to support the combat forces. Beginning 17 October, MATS flew 54 missions to airlift approximately 800 tons of equipment into the area. In a four-day period, beginning 21 October, MATS airlifted 3,600 Marines and 3,200 tons of equipment into Guantanamo, Cuba and the southeastern United States.¹¹

On 17 October DCS/Systems and Logistics, Hq USAF, established a 24-hour Logistics Readiness Center to supervise the prepositioning of critical materiel at southern operating bases. At the request of AFLC, the LOGAIR budget was increased by \$200,000 on 18 October to provide for extra section flights and reroutings.¹²

By midnight 19 October all requirements, with minor exceptions, which did not affect Air Force capability, were in place. Almost 7,000 tons of materiel were airlifted, some from as far away as the Philippines and Turkey. Major items shipped included 3,849 750-lb bombs, 1,854 GAM-83's, 2.7 million rounds of 20-mm ammunition, 1,548 fire bombs, 33,765 2.75" rockets, 2,219 launchers, 1,440 CBU bombs, and 1,020 fuel tanks and pylons.¹³ The airlift proved to be inadequate to move the entire tonnage, such as heavy fire trucks and vans, which were sent by road.¹⁴ Logistic support for the one-eighth SAC airborne alert was excellent--the result of an on-shelf spares program approved and funded by Congress, and AFLC's up-to-date readiness plan and timely support actions.¹⁵

Increasing the Alert

All USAF commands--with the exception of USAFE--were in DEFCON 3 on 23 October.¹⁶ The next day, 24 October, at JCS direction SAC increased its alert posture to DEFCON 2,¹⁷ and the Chief of Staff, USAF, was appointed

as Executive to direct CINCSAC and CINCNORAD.¹⁸ With the establishment of DEFCON 2, SAC activated all forces not already on alert and, within 24 hours, increased its ready force from 912 to 1,436 bombers, 134 to 145 ICBM's, and 402 to 916 tankers.¹⁹ The first Minuteman ICBM went on alert on 27 October; a total of nine were on alert three days later. By 28 October the deterrent force provided by the Single Integrated Operations Plan (SIOP) included 1,576 aircraft, and 382 missiles.²⁰ The in-commission rate for all ICBM's during the period 23 October through 2 November reached a high of 92 percent.²¹

During this period of increased alert, CONAD deployed a total of 1,044 aircraft for air defense. By 26 October they included: 598 aircraft on five to fifteen-minute alert; and 446 on one to three-hour alert. The Florida-based CONAD force consisted of 154 aircraft: 26 on five-minute alert; 35 on fifteen-minute alert; and 55 on one to three-hour alert. Four to 11 aircraft maintained an airborne alert around the Florida peninsula.²² On the 27th, CINCONAD reported 94 percent of the fighter force, 92 percent of the SAM's, and 99 percent of the surveillance forces were operationally ready.²³

Earlier, by the morning of 23 October, the Oplan 312 tactical strike force was on one-hour alert and capable of going immediately to a higher stage of readiness. On the 26th TAC began low-level reconnaissance over Cuba which disclosed additional targets and resulted in air offensive planning for three massive airstrikes a day until Cuban air capability was destroyed. The first of these strikes, including Naval forces, was to involve 576 sorties; the second and third strikes scheduled for the first day of operations would bring the total sorties to 1,190.

As of 26 October CINCLANT had 579 aircraft in his attack force.²⁴ On 28 October all alert crews were on standby status in the operations ready rooms, and external power plants were connected to the aircraft.²⁵ Sixteen F-100's, armed with LAU rockets, were ready to attack specific SAM sites in retaliation for loss of reconnaissance aircraft.* On this same date, low-level reconnaissance verified the start of dismantling of the missile sites.²⁶

MATS was responsible for the entire troop drop capability in the event of an invasion of Cuba. C-124 training was stepped up with the first indication of the heightening of the Cuban crisis and a crash program was instituted to provide equipment. By 30 October, 228 crews were combat ready and the equipping program was complete.²⁷

To overcome a major deficiency in ballistic missile warning for the southeastern area, Hq USAF on 23 October directed that the FPS-49 BMEWS tracking radar at Moorestown, N.J., be placed on 24-hour operation to provide detection capability for missiles launched from Cuba. On the 24th radar trackers at Laredo, Tex., and Thomasville, Ga., were aligned for missile warning. By 29 October the system was operational, with Navy picket ships tied into the air defense net for added low-level coverage.²⁸

Following initiation of the naval quarantine on 24 October, CINCLANT requested Air Force assistance in locating and identifying shipping. Queried at a meeting of the JCS as to its capability for such an operation, the Chief of Staff, USAF, indicated that the Air Force could locate all ships in

*The previous day, 27 October, a U-2 piloted by Maj. Rudolph Anderson was shot down over Cuba while on a reconnaissance mission. Major Anderson was killed.

the Atlantic within four hours.* The assertion was well founded: CINCLANT later related that his forces could not plot positions as fast as they were called in by USAF reconnaissance.²⁹ On the 24th, the USAF Weather Service, the Air Photographic and Charting Service, and elements of the SAC B-52 airborne alert force were directed to begin surveillance. On the 25th, Operations Blue Banner and Baby Bonnet began, involving scanning the seas in the blockade zone by 16 KC-97's and five RB-47's. Low-level reconnaissance of Cuba also was stepped up on 26 October with initiation of RF-101 missions and two daily WATS weather data flights.³⁰

The Air Force on 28 October recalled and assigned to TAC more than 14,000 air reservists. They manned 21 C-119 troop carrier squadrons, 3 C-123 troop carrier squadrons, and 6 aerial port squadrons, together with associated headquarters and support units. Earlier, starting on 23 October, significant numbers of Air Force reserve recovery groups and squadrons reported for voluntary duty, principally in support of SAC, TAC, and ADC.³¹

During the critical days of 22-26 October, Hq USAF acted to insure that sufficient ammunition was available. The Lake City Ordnance Plant, Ogden, Utah, was placed on a three-shift seven-day week to produce 20mm cartridges; the Army was requested to accelerate production of CBU-1/A and CBU-2/A munitions; and AFLC arranged to have 3,000 5" Zuni rockets--borrowed from the Navy--in place at Homestead AFB by 30 October.³²

Maintaining the Alert

From 29 October through the end of November, Air Force contingency

*An RB-47 can "sweep" a path 200 miles wide at a speed of 1,000 mph.

actions were devoted primarily to maintaining the alert force, and preserving simultaneously the overall capability of USAF's combat commands. Continual re-evaluation of the Oplans, in anticipation of a possible invasion of Cuba, led to a JCS decision on 31 October against the earlier planned use of tactical nuclear weapons in invasion operations.³³ On 2 November, following JCS instructions, the Air Staff cancelled all planning and preparations for Oplan 314-61, except for portions of the plan applicable to Oplan 316. The Air Staff also speeded action to increase the force structure and the number of designated operating bases well above Oplans 312 and 316 initial requirements.³⁴

On the last day of October, SAC further increased its deterrent umbrella by boosting the B-47 Reflex alert force by 22 aircraft, and on 1 November deployed 86 KC-97's to three overseas bases, upgrading approximately one-fourth of the dispersed B-47 fleet to first-cycle bomber status.³⁵ SAC's immediate execution capability reached a peak by 4 November, with a striking power more than double that of 19 October. It included 1,479 strike aircraft, compared to the earlier 652; 182 ICBM's, compared to 112; 2,952 weapons, compared to 1,422; and 1,003 tankers compared to 358.³⁶ Between 23 October and 26 November, SAC tactical aircraft made 2,511 flights (with a total of 8,101 weapons aboard) without an accident. By 15 November, however, adjustments were necessary to prevent degradation of crew proficiency and inventory. Combat Crew Training Schools were resumed, to insure limited training for each combat crew.³⁷ By JCS instruction, SAC established DEFCOM 3 on 21 November and terminated the one-eighth airborne alert.³⁸ Three days later, SAC returned to its normal posture--DEFCOM 4--and recalled the dispersed B-47 force.³⁹

Similarly, the JCS on 31 October approved a reduction of CONAD's dispersed air defense force from 173 to 143 aircraft, in order to recycle weapons and improve maintenance of operational systems.⁴⁰ Although CONAD remained in DEFCON 3, its forces changed on 3 November from alert status Charlie to Bravo, reducing the 15-minute alert requirement for aircraft from 50 to 33 percent.⁴¹ On 18 November CONAD returned its dispersed aircraft to their home bases and reestablished the normal one-third alert.⁴² During the period 22 October to 26 November, ADC flew a total of 13,047 sorties--2,800 of them from Florida bases.⁴³ As of the 29th of November, CONAD was on DEFCON 5, with the exception of the 32nd Region which maintained DEFCON 3 status. Twenty F-101's were maintained at Homestead AFB until permanent air defense requirements for the 32nd Region were determined.⁴⁴

At the end of October, CINCAFLANT forces included 574 USAF aircraft, 75 Marine, and 43 Navy aircraft.⁴⁵ To exercise the force and maintain crew proficiency, CINCAFLANT on 2 November directed that 20 percent of the aircraft fly daily, and on 8 November took an additional step to prevent degradation of aircraft and crews. A reorganized strike posture placed 328 aircraft on ready alert status to form the first two waves of an initial strike. The remaining 235 aircraft, constituting the third wave, were released for local flying and maintenance, subject to recall for strike within four hours.

On 20 November the President announced the lifting of the quarantine against Cuba in response to a Soviet agreement to remove the IL-28's. Low-level reconnaissance confirmed the dismantling of these aircraft on 24 November. In succeeding days all TAC aircraft and crews were returned to

their home stations with the exception of a small residual force of fighter, tanker, and reconnaissance aircraft maintained at Key West NAS and McCoy AFB.⁴⁶

During the October-November crisis AFLC accelerated depot level maintenance and returned to SAC approximately 130 B-52, KC-135, and B-47 aircraft within a three week period. AFLC also prepositioned the following petroleum supplies: 612,000 barrels of jet fuel, 521,000 barrels of aviation gasoline, and 276,000 gallons of aircraft engine lubricating oil. The value of these products was \$2.5 million, \$3.6 million, and \$1.5 million, respectively. As of 24 November, AFLC had moved about 170,000 tons at a cost of a little over \$2 million. LOGAIR flew 685,000 miles, carrying 1,975 tons at a cost of \$650,000. Movement by commercial surface totaled 167,845 tons at a cost of \$518,000. Obligations as of 31 October were \$142,300 for aircraft appropriation, \$487,000 for other procurement appropriation, and \$2,831,900 for POL.⁴⁷

MATS ADVON, established on 29 October at Langley AFB to support airlift requirements, was discontinued on 10 November with establishment of a new Hq ADVON at Homestead AFB. In all, MATS deployed 3,943 personnel in support of emergency requirements and provided an additional 367 for TAC augmentation. As of 10 November, 517 MATS aircraft and 563 TAC aircraft were available to support existing operational requirements.⁴⁸

On 29 November the Secretary of Defense approved the following criteria for a continued alert posture: (1) high-level reconnaissance--an average of two U-2 flights per day; (2) low-level reconnaissance--4 aircraft on 12-hour alert, 8 aircraft on 24-hour alert, and similar readiness for aircraft supporting the mission; (3) reimposition of the quarantine--72 hours; (4) attack on SAM sites, IL-28's, and air defense--48 hours; (5) execution

of Oplan 312-61--72 hours; (6) execution of Oplan 316-62--18 days; (7) air defense--normal posture except for units needed to increase permanent air defense in southeastern United States; (8) strategic forces--normal alert levels.⁴⁹

Conclusion

The Air Force response to the Cuban crisis was outstanding. Problems and deficiencies, however, were revealed in materiel, communications, personnel, and airlift areas. Information was lacking on the status of reserve forces, and there was inadequate coordination and knowledge of the related war plans of the several major commands. Despite these obstacles, the Air Force mustered its strategic and tactical strength within hours and was ready to meet any kind of contingency.

On 7 December 1962 President Kennedy in particular credited SAC with contributing greatly "to the maintenance of the peace and security of the United States and those countries associated with us." The President was referring to the SAC deterrent forces--the strategic umbrella which had enabled him to invoke a naval quarantine and force a Soviet retreat through application of a relatively low order of military power. In this connection, General Power, citing the critical nature of the Soviet threat from Cuba, pointed out that invoking the deterrent power of SAC had depended on warning of sufficient length to launch the ground alert force. The Soviet missiles on Cuban soil had posed an immediate threat to this capability. Although the threat was finally removed, General Power noted there was a continuing danger of attack by missiles launched from submarines or fired over the South Pole. He warned that the only secure forces were airborne alert

aircraft and although hardened missiles, which do not require warning, were coming in, the need for warning will continue into the future.

The specific performance, strengths and weaknesses of SAC and the other major commands, as they were revealed during the Cuban crisis, are summarized in the tabs attached to this report.

REFERENCES

The numbered references below indicate chronologies and/or narratives on the Cuban crisis which were submitted to AFCHO. Thus, for example, the first reference--11C60/69D4--refers both to an AFCIN chronology (No. 11, page 60) and a SAC document (No. 69, page 4). A complete listing of references is available in AFCHO.

- | | |
|------------------------------|------------------------------|
| 1. 11C60/69D4 | 23. 52D5 |
| 2. 11C57 | 24. 52D5/78C6-7 ^x |
| 3. 56C4 | 25. 52D7 |
| 4. 52C6 | 26. 24C32/78C6 ^x |
| 5. 24C42/69D1 | 27. 82C3 |
| 6. 24C48/5212/65C3 | 28. 24C1/56C14/25C18/65D4 |
| 7. 56C12 | 29. 81C2 |
| 8. 24C47/52C11/65D1 | 30. 24C1/24C43 |
| 9. 24C50/52C85 | 31. 32D10/57C1/14D4 |
| 10. 24C33/78C10 ² | 32. 48C2/1C1/41C9-10 |
| 11. 12C45/80D5/65C4 | 33. 24C1 |
| 12. 49C1/49D3 | 34. 52C8-11 |
| 13. 41C4-5 | 35. 24C7-8/24C33 |
| 14. 41C7 | 36. 69D4 |
| 15. 47C14-15 | 37. 24C9 |
| 16. 24C18 | 38. 52D25/24C4/69D1 |
| 17. 24C23 | 39. 52D27/69D2 |
| 18. 56C15 | 40. 52C18 |
| 19. 56C14-15/69D3 | 41. 52D13 |
| 20. 52D7 | 42. 24C12/65D2 |
| 21. 69D7 | 43. 65D3 |
| 22. 53D3 | 44. 52D27 |

45. 52D8

46. 24C1/24C6/24C14/78C16 *

47. 64D8-9

48. 62D3-4/80D6

49. 52D7

50. 69D9

STRATEGIC AIR COMMAND*

A SAC U-2 aircraft on 14 October brought in the first photographic evidence of Soviet medium-range ballistic missile sites in Cuba. Subsequent flights verified this discovery, revealed the presence of intermediate range ballistic missile sites under construction, and the presence of Soviet IL-28 jet bombers. In compliance with a JCS message of 22 October, CINCSAC placed the command on DEFCON 3, directed implementation of a one-eighth airborne alert of the B-52 forces, and ordered the dispersal of 183 second cycle B-47's to 33 (later 32) civilian and military airfields. On 24 October SAC increased its alert posture to DEFCON 2 and within 24 hours increased its ready force from 912 to 1,436 bombers, 134 to 145 ICBM's, and 402 to 916 tankers. The first Minuteman went on alert on 27 October; a total of nine were on alert three days later. The in-commission rate for all ICBM's during the period 23 October through 2 November reached a high of 92 percent. Also on 24 October--with the initiation of the naval blockade--elements of the SAC B-52 airborne alert force were directed to aid CINCLANT in surveillance of the seas. The following day Operations Blue Banner and Blue Bonnet began, involving 16 KC-97's and five RB-47's.

In maintaining the deterrent umbrella, SAC on 31 October increased the B-47 Reflex alert force by 22 aircraft, and on 1 November deployed 86KC-97's to three overseas bases, upgrading approximately one-fourth of the dispersed B-47 fleet to first-cycle status. SAC's immediate execution capability reached a peak by 4 November, with a striking power more than double that of 19 October. It included 1,479 strike aircraft, compared to the earlier 652; 182 ICBM's, compared to 112; 2,952 weapons, compared to 1,433; and 1,003 tankers, compared to 358. Between 23 October and 26 November, SAC tactical aircraft made 2,511 flights (with a total 8,101 weapons aboard) without an incident. By JCS instruction, on 21 November SAC established DEFCON 3 and terminated the one-eighth airborne alert. Three days later, SAC returned to its normal posture--DEFCON 4--and recalled the dispersed B-47 force.

Problem Areas and Lessons Learned

1. The crisis provided SAC with the best and most realistic exercise of its command and control function in its history. During the alert problems arose which had not appeared in command post exercises of the past. The emergency emphasized the need for command and staff continuity during pre- and trans-attack periods. As a result of the Cuban exper-

*Based on data in TWX, SAC to CSAF (For AFCHO), DXIH B90204, 6 Dec 62.

ience, SAC has changed some of its battle staff procedures.

2. During generation of the ICBM force, tanks of missiles configured for operational readiness training (ORT) had to be purged of liquid nitrogen and prepared for liquid oxygen in order to be placed on alert. Also, sufficient LOX support was not immediately available. A national priority was given SAC and production from all commercial and government plants supported the project, which was completed by 1300 hours 25 October. As a result of this experience, SAC has initiated a policy whereby all ORT/shutdown ICBM's in the future will remain in a LOX configuration. This constitutes a significant departure from previous policy.

3. On 24 October the AFSC/SAC Agreement for Emergency Combat Capability (ECC) of Ballistic Missile Launch Complexes was executed for the first time. Reaction time was immediate. Twenty AFSC missiles were turned over to SAC and placed on alert.

4. Communication links with the medium dispersal bases were not designed to handle the heavy traffic caused by the prolonged alert. Consequently, additional back-up capability was required. On 24 October the American Telephone and Telegraph Co. established lines at 32 dispersal bases in nine hours--an outstanding example of support. Within 24 hours after the arrival of B-47's at the dispersal bases, procedures were established for UHF and HF single sideband monitoring.

5. Actual experience with SAC's medium dispersal plan pinpointed some areas where procedures could be improved. A thorough review of unit and numbered Air Force recommendations is underway.

6. The Cuban crisis validated measures taken by SAC over the years to maintain its units in a high state of readiness. SAC had 92.5 percent

of its weapon systems ready to launch in the first hour following DEFCON

2. No tankers were available for the remaining 7.5 percent.

TACTICAL AIR COMMAND*

The increasing seriousness of the Cuban situation during the summer of 1962 alerted the Tactical Air Command to the necessity of preparing a well-planned, thoroughly coordinated tactical air offensive to be launched against Cuba well in advance of an airborne assault and amphibious landing. JCS planning had made no provision for such an operation. On 7 September Cmdr TAC established a working group to develop such a plan and on 11 September he briefed and won approval for the concept from CINCSTRIKE. On 27 September the plan was presented to the Chief of Staff, USAF. It was approved and 20 October was assigned as the date when all implementation preparations would be completed. Cmdr TAC was directed by the Chief of Staff to offer the plan to CINCLANT with the assurance of full Air Force support. On 28 September Cmdr TAC briefed CINCLANT and offered to serve as the Air Force Component Commander (CINCAFLANT) for all planning and execution action. The proposal was immediately accepted and within 48 hours the plan was officially designated as CINCLANT Oplan 312. CINCAFLANT was provided control of target allocation, priority of attack, and operational control of all air forces--including Naval air--conducting operations against Cuba with the exception of those to be employed in the defense of Guantanamo. By 10 October TAC forces had already commenced training exercises at McCoy, MacDill, and Homestead AFB's and the build-up of war readiness materiel at these bases had begun. The JCS were formally briefed and approved Oplan 312 on 20 October

Problem Areas and Lessons Learned

1. Although the proximity of LANT, AFLANT, and ARLANT Headquarters in the Norfolk, Va., area facilitated inter-command coordination, these headquarters were too far from the combat zone if the Oplans had been executed. Accordingly, AFLANT and ARLANT and ADVON Headquarters were established at Homestead AFB and it was envisaged that CINCAFLANT and CINCARLANT would move to the ADVON's in time to execute Oplan 312. CINCLANT planned to remain in the Norfolk area, except for brief visits, until execution of Oplan 316 was imminent.
2. The concentration of several wings on each of the Florida bases--some bases housing fighter, tanker and reconnaissance units--created difficulties.

*Based on Rpt by TAC, Highly Compressed Narrative Account and Assessment of "Tactical Air Command the Cuban Crisis," attach to ltr, M/Gen Walter E. Arnold, C/S, TAC to Hq USAF (AFCHO), 7 Jan 63, subj: The Air Force in the Cuban Crisis.

To resolve the problem, provisional air divisions (reporting to CINCAFLANT) were established at Homestead, McCoy, and MacDill AFB's to exercise operational control of all TAC force at these stations and to insure proper support of the tactical units by the organizations permanently assigned to the bases.

3. During the early days of the low-level reconnaissance missions, the execution order to launch reconnaissance aircraft was frequently received too late in the day to insure good photography. This was because execution orders were deferred until the previous day's photography had been analyzed by the Secretary of Defense and the President. Measures were taken to provide faster reaction: a Tactical Reconnaissance Center was established at MacDill AFB; an air courier system was inaugurated to speed delivery of photographs to Washington and the strike forces; the Reconnaissance Operations Center at AFLANT Headquarters was strengthened; and procedures established permitting simultaneous receipt of reconnaissance execution orders by all agencies concerned. The combination of all these measures substantially advanced the reconnaissance capability and proficiency of TAC.
4. Undermanning in certain activity fields presented difficulties in maintaining the required 24-hour alert schedule. Despite a 200-man augmentation at Hq TAC, the average officer worked a 15-hour day seven days a week. Crew authorizations in fighter and troop carrier wings were too low to sustain the required alert status and to accomplish, simultaneously, the required operational sorties and maintain the desired training program. TAC fighter wings were undermanned in the security, armament, and communications areas. The resources of other commands had to be used extensively to meet minimum requirements at the Florida bases.

5. There were too few TAC units permanently stationed in Florida to provide a satisfactory base of support for the number of units deployed to the area during the crisis. Despite SAC evacuation of its bases and the availability of some space at Key West, conditions were so crowded on the available bases that only minimum dispersion of aircraft and munitions was possible.
6. TAC lacked an initial authorization for war reserve conventional munitions, wing tanks, napalm tanks, and pylons, thereby necessitating the build-up of these supplies at the expense of overseas commands.
7. TAC possessed inadequate photographic intelligence of potential Cuban targets and lacked high-resolution aerial cameras and efficient photo-processing equipment which limited its ability to produce quality target photography in a timely manner.

AIR DEFENSE COM AND

When the Cuban crisis began USAF air defense forces in the southeast United States consisted of four F-102's at Homestead AFB, six RC-121's at McCoy AFB, and two interceptors on alert at Tyndall AFB. Between 19 and 21 October the air defenses in Florida were bolstered and by 22 October ADC forces in the state totalled 24 F-106's at Patrick, 36 F-102's at Homestead, and 12 RC-121's at McCoy. In addition, 60 interceptors were on alert at Tyndall. ADC was placed on DEFCON 3 on 22 October and in less than seven hours 161 interceptors--carrying nuclear armament for the first time in an operational situation--dispersed to 16 bases.

During the period 22 October to 26 November, ADC flew 13,047 sorties: 2,800 from Florida bases; more than 2,200 ferrying and rotating aircraft from home to dispersal bases; and more than 8,000 normal training sorties. ADC deployed 275 additional officers and 1,121 airmen into operations in the southeast United States. In addition, 599 officers and 1,393 airmen were involved in the dispersal of the interceptor force. On 18 November the dispersed aircraft were ordered returned to their home bases and the normal one-third alert was reestablished. By 29 November ADC was on DEFCON 5, with the exception of the 32nd Region which maintained DEFCON 3 status. Twenty F-101's were maintained at Homestead until permanent air defense requirements for the 32nd Region could be determined.

Problems and Lessons Learned

1. Generally, ADC performed its mission during the crisis with a high degree of efficiency in the face of unprecedented conditions. It was fortunate, however, that the emergency affected the air defense of only one area of the United States. This enabled the command to withdraw forces from other areas to build up the southeastern defenses. Had the pressure been general throughout the command, it would have been difficult to provide the additional reinforcements needed in the southeast. The crisis revealed the importance of obtaining higher materiel and personnel priorities to keep air defense at the highest peak of effectiveness. A higher crew ratio than the 1.2 ratio presently authorized was

*Based on TWX, ADC to CSAF (For AFCHO), ADC 10-H 3376, 6 Dec 62

recommended by ADC.

2. Problems arose during the dispersal of 28 squadrons to 16 bases due to a shortage of facilities. Not all bases were ready to receive interceptors. Difficulties were overcome on an improvised basis; however, in severe weather ADC's capability to perform from this dispersed posture would have been degraded. An improved and more permanent dispersal posture is required, such as advocated in ADC's Dispersal Plan 20-62, which calls for four to six aircraft from each squadron to be permanently located on dispersal bases.
3. The temporary waivers granted during the crisis for nuclear quantity-distance criteria at dispersal bases were helpful, but rules permitting more flexibility are needed.
4. To overcome a low level interceptor deficiency against slow prop-driven aircraft from Cuba, ADC deployed F-102's and TF-102's armed with 2.75" rockets to the southeast. The TF-102's possess night and low level interception capability.

UNITED STATES AIR FORCES IN EUROPE*

The first actual knowledge of the Cuban situation was provided CINCUSAFE on 22 October. Prior to that date there were indications that preparations for invoking CINCLANT Oplans were in progress and CINCUSAFE advised Hq USAF there were certain preparatory measures which his command should take to improve its readiness posture. He was informed that "no measures would be taken which could be considered provocative or which might disclose operational plans." CINCUSAFE on 23 October ordered a "discreet increase in the overall capability of his forces in a gradual and unobtrusive manner to avoid exacerbating tensions in Europe." These actions ultimately encompassed: the return to Europe bases of 94 USAF aircraft training at Wheelus AB, Libya; the reduction of tactical training in Central Europe and the U.K.; the expediting of maintenance to increase to 90 percent the operationally ready aircraft; the deployment of a F-104 squadron from Moron AB, Spain to Hahn AB, Germany; the transfer of nuclear strike targets from two squadrons in Germany to units in the U.K., thus freeing the European squadrons for conventional operations in the event of a Berlin contingency; and the placing of the 65th Air Division on Air Defense Condition Alpha in conjunction with the alert of SAC forces in Spain. These actions were generally completed by 2 November. During the period of the crisis, USAF provided logistic support to the CINCLANT forces in the United States, sending a total of 230 tons of ammunition and 24 tons of aircraft consumables (rocket launchers, pylons).

Problems and Lessons Learned

1. There was inadequate official information during the days immediately preceding the public announcement of the crisis.
2. Confusion existed in regard to war readiness materiel (WRM) because shipment directives from CONUS were based on non-current inventories. Whether inter-theater shifting of WRM should be directed through unified commands, or whether services should direct WRM moves with information to unified commands, remained an unsettled question.
3. USAF capability was restricted because of the prohibition against a declaration of formal alert and the resulting directive that all actions be quiet, unobtrusive, and non-automatic.

* Based on TWX, Hq USAF to CAFE USAF (for AFCHO), OHH 62M-1714, 6 Dec 62.

4. The USAFE strike force was weakened by the inability to win SACEUR approval for improving the dispersal posture of the strike force, as exemplified in SACEUR's disapproval of the 366th Tactical Fighter Wing being moved to a forward German base.

5. USAFE out-shipment of theater stocks of war consumables aggravated an imbalance of WRM stocks which had existed since the beginning of the STAIR STEP operation the previous year.

6. CINCUSAFE advised USCINELC and USAF Chief of Staff on 22 October that 37 USAF strike aircraft on quick reaction alert on the continent

7. During November, USAFE continued to maintain a higher than normal aircraft O/R, exceeding the USCINEUR/SACEUR requirements at the time.

8. The lack of French nuclear storage rights limited USAFE capability.

9. The crisis demonstrated the need for increased knowledge of logistic, war, and contingency plans at all echelons. It reaffirmed the value of conducting exercises such as FALLIX/HIGH HEELS and continuing the readiness testing of USAFE units and the USAFE command structure.

PACIFIC AIR FORCES*

On notification of world-wide DEFCON 3, the PACAF battle staff was formed immediately and all actions required to establish the DEFCON including notification of subordinate commands were initiated. COMUSK, with the concurrence of ROK, placed all UN forces in Korea on condition Roundhouse (to provide quick reaction under the guise of training). U.S. forces in South Vietnam and Thailand were already in DEFCON status at the onset of the crisis. All quick strike flyable aircraft were loaded and assumed an alert posture to insure an immediate reaction capability. All PACAF fighter interceptor units increased alert status to four aircraft on five minutes, two on thirty minutes and all other operationally ready aircraft on one hour alert. On 24 October six F-102 aircraft were deployed from Japan to Osan, Korea and immediately assumed the alert posture of two on five-minute alert, two on thirty minute and two on one-hour alert. Three Toy Tiger RF-101 aircraft and support equipment were deployed to Shaw AFB with some delay due to maintenance and weather difficulties (a fourth was at OAMA being repaired). Plans were consummated to deploy PACAF C-130 aircraft in support of contingency requirements. PACAF advised CINCPAC that a total of 42 of the 58 C-130's assigned to the command could be deployed without a maintenance stand down, with the others deployed subsequently.

Problem Areas and Lessons Learned

1. PACAF support of CONUS operation Quick Fox--diverting two C-130B's as airborne communications reconnaissance platforms--diluted similar efforts in the Pacific command.
2. The shortage of modern airlift continues to be a limiting factor in the successful implementation of several major operations simultaneously. The loss of theater C-130 aircraft would delay initial PACAF deliveries under the SIOP.
3. Reconnaissance vehicle availability is limited and is marginally adequate to sustain reconnaissance activities at a routine level.
4. The increased DEFCON for PACAF forces was assumed without degradation or abatement of PACAF efforts in southeast Asia.

*Based on TWX, PACAF to CSAF, PFCOI-H 016-62 (for AFCHO), 5 Dec 62.

MILITARY AIR TRANSPORT SERVICE*

MATS role in the Cuban crisis was that of direct combat support. During October it conducted an energetic training program to insure its capability to airdrop the entire paratrooper force if Oplan 316 were executed. In addition, MATS moved a large portion of the combat forces, together with accompanying supplies, directly into the forward area. These movements were accomplished while MATS also was engaged in meeting other world-wide commitments. Between 1 October and 20 November, MATS transport aircraft flew 99,000 hours in 3,800 missions. The latter included the movement of 900 troops and 2,000 tons of equipment to support a ZI Army exercise; airlift of 1,300 troops and 470 tons of cargo to Europe and return; deployment of 3,000 troops and 470 tons of cargo from Europe to Greece and back; rotation of U.N. troops from Sweden and Ireland to the Congo; and continuation of Operation Deep Freeze, which required the airdrop of 900 tons and the airlanding of 460 tons of cargo at Antarctica. These scheduled missions were flown in addition to routine special assignments and normal theater support.

Among the unforeseen requirements placed upon MATS during the period were: the movement of 7,000 troops and 2,000 tons of equipment into Mississippi in a four-day operation; the intensification of the Indian crisis which required C-135's to airlift nearly 1,000 tons of arms and ammunition from Europe to India; the necessity of rushing communications and electrical gear to La Paz, Bolivia; the airlift of generators and other equipment to Venezuela to help counteract the effects of sabotage to the oil refineries; and the airlift of tents, blankets, field kitchens, medical supplies, and personnel to Guam following a typhoon. Finally, the tie-up of MSTs vessels for possible use in the Cuban emergency, placed the responsibility of transporting 11,000 Army passengers overseas on MATS.

Problems and Lessons Learned

1. During periods of international tension, the MATS workload is greatly increased. While other commands concentrate on insuring their ability to execute their war plans, MATS is required to accelerate its operations to build up the primary combat forces and support the overall DOD readiness posture. At the same time MATS must insure its own capability to execute assigned wartime tasks. In an emergency airlift requirements cannot be

*Based on TWX, MATS to CSAF (For AFCHO), MADIH 3034M, 5 Dec 62; TWX, MATS to Hq USAF (For AFCHO), MADIH 3078M, 13 Dec 62; Ltr, MATS (MADIH) to AFCHO, 12 Dec 62, subj: Cuban Crisis, w/atch, "MATS Operations During the Cuban Crisis."

accurately predicted in advance, and airlift capability must be adaptable to constantly changing missions and priorities. These facts should be recognized in developing airlift force structure requirements.

2. During the Cuban crisis the commercial contract carrier industry was unable to respond to all requirements. Approximately 17,000 tons of cargo were moved to support theater deployed forces--the third highest month in MATS history--but some lower priority requirements could not be satisfied or had to be delayed. Actual expenditures for commercial augmentation of MATS airlift in October-November exceeded program expenditures by approximately \$8,961,000. This was due to withdrawal of military airlift to support unforeseen requirements including Cuba. This deficiency highlights the importance of programming an airlift force of adequate size and capability.

3. Passenger movement requirements were high--partially the result of 11,000 Army personnel being diverted from MSTs to MATS. The actual generation of passengers for the two-month period, however, fell short of the final stated requirements by 28,858. This represented a "no-show" rate of 13 percent as compared to a normal 5 percent rate. It appeared likely that some planned TDY and PCS travel failed to materialize because of the Cuban situation.

4. Accurate and useable information from airlift users on numbers of personnel and amounts of cargo to be moved was difficult to obtain and loads often failed to generate on time. This created delays and resulted in excessive numbers of aircraft at pickup bases. Parking space problems were aggravated and aircraft and crew utilization suffered.

5. The reserve force recall program could have been improved by additional coordination with the major command. Terminal reserve forces could have been scheduled for mobilization to support the increased airlift activity.

AIR FORCE SYSTEMS COMMAND*

By USAF direction, AFSC placed the Moorestown, N.J. prototype BMEWS radar on alert to provide warning of any missile launches from Cuba, and it temporarily turned over to SAC 20 ICBM's, comprising a 71 megaton warhead yield, for an emergency combat capability. The command also modified and converted a SAGE and MPS-14 height finder radar to provide a missile detection capability, accelerated action to provide C-Band jammers for the B-52 fleet, and provided 18 officers and 150 airmen to the combat commands on TDY to assist in communications, security, materiel, operations and intelligence. AFSC additionally supported 4,370 SAC, ADC, and AFLANT personnel deployed at Eglin, Patrick, L.G. Hanscom, and Edwards AFB's.

Problem Areas and Lessons Learned

1. The Cuban crisis brought to light defects in the command's contingency plans and remedial actions were taken as the situation progressed. As a result, AFSC emergency plans are now more realistic and responsive.
2. War plans of the various commands must be closely coordinated to assure that support and interdependent requirements are adequately provided. For example, emergency drafts of officers and airmen from AFSC will be facilitated if operational command war plans delineate them in advance.
3. There should be minimal reliance on post-attack, inter-command and intra-command communications to implement vital actions. Certain actions should be automatic upon occurrence of a set of pre-postulated events to preclude failure of performance if communications links fail.
4. It was apparent during the crisis that tactical reconnaissance had suffered severely from funding limitations. Undue delay occurred in

*Based on Ltr, AFSC (SCEH) to Hq USAF (AFCHO), 5 Dec 62, subj: Command Response in Cuban Crisis.

obtaining and forwarding intelligence data from reconnaissance units to decision-making levels. These deficiencies will serve to re-emphasize the need for improving our reconnaissance posture.

5. AFSC experience has resulted in the recommendation that R&D test missiles be excluded from the transfer to operational status, at least in early stages of future graduated emergencies. This is converse to SAC's post-contingency evaluation.

6. The actual emergency spurred a realistic reappraisal of USAF program priorities. An effort was initiated at the outset of the crisis to identify those programs which, if promptly accelerated, could provide an early payoff and enhance our capability to prosecute the war. The effort also was directed at the identification of programs worth continuing for support of an extended emergency, and the programs which should be suspended to make funds available for endeavours which would be of greater benefit under the prevailing circumstances. In the future all AFSC divisions, centers, SPO's, and CMR's will have instructions assigning relative program priorities under various sets of circumstances.

AIR FORCE LOGISTICS COMMAND *

The major function of AFLC during the Cuban crisis was support of the combat forces. On 24 October, when SAC was placed on DEFCON 2, AFLC accelerated the return of SAC aircraft in modification and repair--approximately 130 aircraft (B-52's, B-47's, and KC-135's) were returned to combat units within three weeks. The possibility of an invasion of Cuba created a shortage in properly modified MATS C-124's. To meet the requirements, AFLC gave 100 C-124's interim emergency modification for paratroop and air drop capability. AFLC was primarily responsible for prepositioning and maintaining WRM for use of the tactical forces. As of 24 November, AFLC had moved 170,000 tons at a cost of approximately \$2,000,000. LOGAIR flew 695,000 miles, carrying 1,975 tons, at a cost of \$650,000. Movement by commercial surface totalled 167,845 tons at a cost of \$518,000 and commercial air amounted to 23 tons at a cost of \$11,000. By 30 November, AFLC had obligated \$28,374,100 in funds for support of the Cuban crisis.

Problem Areas and Lessons Learned

1. Consolidated materiel distribution objectives (CMDO) for War Readiness Materiel were not current and were inaccurate. USAF, AFLC, and other major headquarters made many CMDO changes which resulted in unnecessary expedited procurement, overtime, and premium transportation.
2. Late changes in deployment and employment plans resulted in changes in bases used, changes in type and number of aircraft, changes in usage rates. These required crash recomputation of requirements. TAC also planned operations at certain bases where its daily Oplan 314 aviation fuel requirements exceeded the capacity of base fuel systems.
3. In requisitioning, operation bases assigned higher priorities than authorized, requisitioned non-prime items, and requisitioned local purchase items and other materiel not in support of the emergency. Although AFLC published a requirement that all commands specify project code designator

* Based on TWX, AFLC to Hq USAF (For AFCHO), MCKH-37-62, 5 Dec 62.

and precedence rating associated to the Oplans, there were few examples of customers furnishing these.

4. Because they did not receive copies of the plans promptly, AMA's had difficulty meeting certain requirements relating to contingency planning. Delays in issue of the final approved plans and inadequate courier service were factors in this problem.
5. All major air command dispersal plans should be fully approved and made known to all AFLC bases to allow complete logistic planning.
6. Some items in R&D, but not identified as such, were included in WRM lists with no substitutes indicated. This resulted in numerous calls and wires to find acceptable items as substitutes.
7. Depot specialized repair activities responded more quickly with less confusion and with greater control than contract facilities. The use of contractors to bolster master repair schedule work is not practical in short emergency periods.
8. Serious consideration should be given to continuing input of B-52 aircraft to mod/maintenance during a crisis.
9. Base, force structure, and WRM annexes to plans should be prepared for each area where U.S. emergency action may be required. AFLC should be authorized, under conditions of DEFCON 3, to procure back orders automatically to support the defense effort. Requirements for all kinds of contingency, local war, and general war should be established to get the best mix for one over-all WRM listing.
10. The command's directly controlled transportation facilities (LOGAIR) provided the most rapid and efficient capability within COMUS. The system

was responsive to the emergency. However, the C-46's in the LOGAIR system should be replaced by more modern aircraft such as DC-6's and 7's.

11. To expedite vital procurements under emergency conditions, prepositioned action messages should be available to Hq USAF (a) to suspend the requirement that AFLC obtain Secy/Def approval to cite P.L. 413 in sole source procurements over \$350,000; (b) to suspend \$1 million "award notification" requiring AFLC to withhold an award for a specific period after notifying Hq USAF; and (c) for other actions needed to speed procurement response.
12. There is a need for aggressive action to prestock and equip designated fallout shelters at all installations.
13. AFLC should maintain a slow production of items such as munitions, tip tanks, and pylons so that an emergency expansion could be expedited.
14. Timely training experienced under HIGS HEELS II and SPADE FORK exercises greatly increased the effectiveness of AFLC support.

AIR TRAINING COMMAND*

DEFCON 3 status was attained without significant difficulty throughout the command by 2358Z on 22 October. In succeeding days, at USAF direction, ATC augmented TAC with 219 airmen and 26 officers to support crisis requirements. These included air police teams, intelligence and transportation officers, loadmasters, air operations personnel and transportation specialists, ground radio operators, H-21B pilots, etc. The command also provided material support, including 103 vehicles, a 250-bed casualty staging unit and 4 ambulance buses, and provided facility support during dispersal operations.

Problem Areas and Lessons Learned

1. More ATC resources were available than used. The command's medical augmentation capability was virtually untapped. An estimated 7,500 fully qualified technical training instructors and support personnel could be made available on short notice.
2. Seven of ATC's eight pilot training bases are not manned to support deployed aircraft for prolonged operations. For short periods, the bases can handle deployments by extending work shifts, and thereby provide tower and CCA operations, Nevada maintenance and refueling.
3. Security of aircraft and equipment was marginal during deployment because of ATC's low manning in security personnel. The dispatch of air police to forward areas further restricted this capability.
4. ATC has about 135 T-29's configured for navigator training. With highly qualified crews, these aircraft can be made available to augment personnel transport resources. However, such usage would be at the expense of navigator training.

*TAC, COMINT to HQ USAF (Attn: AFCHOP), AFCCDWH 012600, 6 Dec 63.

ALASKAN AIR COMMAND

The AAC and Elmendorf command posts were activated within a half hour after establishment of DEFCON 3 at 2300Z on 22 October. In accordance with previously prepared command emergency capabilities plans, manning of emergency positions to include the alternate command post at Wildwood station and the forward dispersal bases was carried out. Approximately 150 officers and airmen manned the alternate headquarters on a rotating basis during the entire alert period. No difficulties were experienced in transporting personnel, supplies and aircraft to the forward bases. Eight aircraft were deployed to each of the three forward bases while the remainder of the command's 40 F-102A's were at Elmendorf AFB.

Problem Areas and Lessons Learned

1. Although the increased readiness posture caused no serious difficulties, as a result of the alert the command discovered certain planning weaknesses which were corrected. The AAC survival plan was revised to furnish more details and provide additional coordination with civil authorities.
2. Civil defense authorities displayed an obviously increased interest, and closer coordination between military and civil defense planning was achieved. Detailed plans for transportation of both military and civilian populations to safe havens were defined. The command feels that the decision for dispersal of military dependents to safe havens should be made at the highest level (JCS) following a determination of the effect of such dispersal on the civilian population.
3. The increased alert brought about direct expenditures of approximately \$26,000 over that visualized in the current budget. Increased funds were required for personnel overtime, TDY and travel; fuel; additional support.

*Based on TWX, AAC to CASP (For AFCHO), ALIF 57, 6 Dec 62.

of SAC and other preparations for evacuation of personnel and supplies. In addition, \$34,000 is to be allocated for equipment and supplies for setting up a field hospital. The emergency pointed up the continuing and increased requirement for large amounts of war readiness material, particularly in the medical field.

4. The increased forward deployment of aircraft to dispersal bases resulted in a reduced flying program and curtailment of training, although the crews remained on duty in excess of 100 hours a week.

5. On 3 November when NCUAD directed the command to go to DEFCON 3 Bravo, AAC reduced the alert aircraft at each forward base by four. During the alert, authority was granted for forward deployment of GAR-11's with nuclear warheads.

6. Of special significance during this period was the fact that there was no indication of increased Russian activity in this vicinity and there were no unusual occurrences from the air defense point of view.

CARIBBEAN AIR COMMAND*

Following establishment of DEFCOM 3 on 22 October, a program of moving anti-riot control equipment into Latin America was begun. Materiel was withdrawn from U.S. Army stocks in the Canal Zone, replenished by additional shipments from CONUS and moved as a joint effort using CAIRC-assigned C-130 and C-54 aircraft and MATS C-133's and C-124's. In a few instances, indigenous aircraft picked up materiel at Howard AFB. Items included rifles, carbines, ammunition, grenades, gas masks, helmets and helmet liners. The need for urgency precluded normal permits for over-fly and landing required for such missions. In this instance host country cooperation on matters of over-fly, base rights, and landing permits was a valuable contribution to success of the mission. Delivery of anti-riot control equipment required rigid control of existing resources and careful coordination of all U.S. military and State Department agencies in Latin America. Eleven flights using C-54's and C-130's were dispatched during the critical period to eight countries carrying 161,176 pounds of equipment.

Problem Areas and Lessons Learned

1. The lack of a modern logistic airfleet was a serious deficiency. The command's 6 C-130's are too few to provide airlift for tactical employment of required forces in support of CARIBCOM's JTF. The command's C-54's are antiquated. The programmed date for receipt of C-118's has slipped to the spring 1964.
2. The Albrook/Howard complex has limited facilities and requires modernization and improvement before it can adequately support a large augmented force. The command operated the two bases with manpower authorizations which were insufficient to operate one base.
3. Until programmed radar equipment is installed, the lack of radar facilities in the Canal Zone for air traffic control or air defense purposes remains a weakness. The few units operated by the Army are not satisfactory for the purpose.

*Based on TWX, CARIC to CASAF (For AFCHO), CIO-H 05-M-051, 5 Dec 62.

4. The delivery of anti-riot control equipment required rigid control of resources and careful coordination of all U.S. military and State Department agencies in Latin America. During the crisis, 11 flights--utilizing CARIC C-54's and C-130's--airlifted 161,761 pounds of riot control equipment to eight countries.

AIR FORCE COMMUNICATIONS SERVICES

The major AFCS effort in the Cuban contingency was the provision of emergency support to the tactical forces. In fulfilling this requirement, AFSC provided air traffic control (ATC) in the Florida area and certain communications and weather services. During the crisis four bare strip navigational aid complexes--with attendant air traffic control and weather communications capability--were supplied; units of the 3rd Mobile Communications Squadron were deployed to Florida bases; a ground-controlled approach (GCA) unit was made operational at Opalocka; TACAN facilities were supplied at Key West; one Talking Bird aircraft was located at Homestead and a second Talking Bird was on four-hour alert ready for deployment into the area. In addition, AFSC deployed five MRC-94 pick-up mounted radio sets to MacDill, McCoy, and Key West to be used as runway supervisory units by TAC fighter squadrons. At the same time, an advance echelon was deployed at Key West to establish and refine procedures to be used by the ATC center.

Problems and Lessons Learned

1. AFCS's quick provision of the navigational aid complexes in support of the tactical forces was the result of a coordinated planning effort between TAC and AFCS initiated nine months earlier. Unfortunately, the implementation of other supporting plans--for which the Service had no previous information--established unexpected requirements. In some instances, AFCS could only partially support these requirements, using the remainder of its mobile capability and substituting equipment not specifically designed for the task.
2. AFCS activated permanent control towers and navaids at two ANG bases and provided control tower and TACAN service at one civil air field to support ADC dispersal operations. However, because of equipment shortages, it was impossible to provide GCA service at these bases, and neither GCA nor TACAN at two other locations.

*Based on TWX, AFCS to Hq USAF (For AFCHO), DI 2445-M, 5 Dec 62.

3. A total of 287 ATC operations and communications maintenance personnel--over and above mobile squadron deployments--were placed on TDY at more than 20 locations in support of the reserve call-up and the many support plans. This resulted in reduced manning at the home bases. The problem was resolved by establishing longer working hours, placing heavy reliance on semi-skilled trainees, and implementing Minimize which reduced message traffic in some areas as much as 67 percent.
4. AFCS C-140A "Jetstar" aircraft--configured specially for emergency mission support operations--proved their worth as the only all-weather flight inspection capability available in the Air Force. As such, they permit a significant improvement in reaction time in contingency operations.
5. On notification that an emergency existed, AFCS placed all of its MARS facilities on 24-hour operation. Although these operated primarily in support of host commands, the value of the area concept of MARS operations was emphatically proved. (AFSC, however, recommended that MARS should not be relied upon as a primary emergency communications system.)
6. In close coordination with other commands, AFCS activated some 450 long haul commercial communications circuits to handle both voice and teletype requirements. The action and cooperation of the commercial firms was excellent, enabling AFCS to meet all commands' requests with minimum confusion. The speed with which these requirements were met was significant and due, it was believed, to the efforts of the one central agency, the Office Commercial Communications at Scott AFB.

AIR UNIVERSITY

Air University was placed on DEFCON 3 at 2300Z on 22 October and immediately initiated 24-hour manning of the command post complex, thus providing an alert staff capable of becoming a nucleus for Hq USAF (Rear). The command's performance in achieving and maintaining a state of readiness was timely and professional. All EMC circuits (TT and TP) were activated. Situation and status of forces reports were kept current from available information. The alert posture was maintained throughout the crisis, with manning adjusted to meet requirements after 3 November. AU returned to DEFCON 5 at 1400Z on 28 November. The most significant impact on AU operations was the recall of 679 student officers who were ordered to return to their regular units on 24 October.

Problems and Lessons Learned

1. Complete and accurate information is essential to the proper functioning of AU should it be required to assume the responsibilities of Hq USAF (Rear). Prior to the declaration of DEFCON 3 and in the days that followed, the necessary information was not available to AU. Timely and accurate APEX and JOPREP reports were not received.
2. During increased alert conditions, manning of the alert staff must be flexible to allow for increased or decreased manning based on requirements within the alert condition, rather than a manning posture based simply on the DEFCON declared.
3. The first operational use of EMATS equipment showed that the equipment was satisfactory. Operating personnel must maintain detailed knowledge of the emergency action file.
4. Recall of the students to operational commands resulted in their violating rental agreements and lease terms, since it was impossible to give landlords the usual 30 day intention-to-move notice. Legally, the recalled officers could be held liable for at least 30 days' rent.

¹Based on FMZ, Hq AU to Hq USAF, AMOIN 1939 (For AFCHO), 5 Dec 62.

CONTINENTAL AIR COMMAND*

The command's main efforts during the crisis centered on the call-up of eight Air Force troop carrier wings and six reserve aerial port squadrons, comprising more than 14,000 reservists and 300 aircraft. However, the command also provided 80 reserve aircraft to airlift vital TAC equipment from points throughout the U.S. to Florida bases on 12-15 October. Substantial assistance was rendered SAC and ADC by 32 of CONAC's dispersal, aircraft recovery, and reconstitution (DARR) units, operating on a voluntary basis to support aircraft dispersal. CONAC reserve air rescue personnel provided support in the southeastern U.S. for reconnaissance operations, and assistance was given MATS by CONAC's C-124 units in airlifting backlogged MATS cargo to various destinations, including Europe and the Far East.

Problem Areas and Lessons Learned

1. CONAC in a sense operated in an intelligence vacuum. It was not consulted in the planning phases of the USAF effort, to the detriment of its own effective performance. Had the command been given earlier notice of wings slated for recall, it could have moved more energetically to "peak" those units. Knowledge of SAC dispersal plans also would have enabled the command to provide better support through its DARR units.
2. CONAC received no queries that would have resulted in recall of the most capable reserve units. On its own initiative after units were selected, the command obtained a change that resulted in recall of a squadron more capable than one originally selected. Also, with no advance preparation, there was inadequate support available for recalled units. For one wing, commercial arrangements had to be made for billeting and messing of personnel.
3. The alignment of major air command dispersal requirements was in process of final development in Hq USAF. Therefore, some DARR units

*Based on TWX, CONAC to CSAF (For AFCHO), OI-1009-62, 6 Dec 62.

were not aligned with MAC dispersal locations. Thus, many regular Air Force units were unaware either of location or capability of DARR units. Listings of locations had to be flown to SAC and TAC.

4. TAC, USAF, and DOD initially made decisions concerning selection and numbers of reserve units to recall based on incorrect information. When the troop carrier wings were recalled, they were called on the basis of corrected strengths provided by CONAC on its own initiative.

5. The crisis demonstrated the DARR program provides an inexpensive form of protection for expensive Air Force weapon systems at dispersed locations. In future emergencies, certain designated recovery squadrons should be called to active duty.

6. Experiences during the crisis suggest the recalled reserve units were not as ready administratively as operationally. More thorough training should be given unit administrative personnel in all aspects of mobilization procedures.

7. There is a need for more extensive liaison between planning groups at TAC and USAFE and Hq CONAC in pre-recall periods.

HEADQUARTERS COMMAND*

All elements of Headquarters Command assumed necessary alert posture as various DEFCOONS were directed. No problems arose in these operations. During the crisis the command flew some 167 sorties with T-39 aircraft in support of SAC and TAC operations. Flying hours expended in all types of aircraft in support of the Cuban contingency totaled 877 hours. Headquarters Command also provided a number of vehicles from Andrews AFB assets to support the contingency. The major difficulty in T-39 support requirements was inadequate parts availability and difficulty in getting qualified pilots released from duties to fly.

*TWX, Hq, Hq COMD to Hq USAF, 5 Dec 62.

UNITED STATES AIR FORCE ACADEMY*

On 23 October the Academy Command Post went on 24-hour a day manning, which continued until 26 November 1962. Thereafter, the duty officers were authorized to stay at home or on the base where a telephone was available. All other activities were negative.

*Ltr, USAFA (DOIH) to Hq USAF (AFCHO), 30 Nov 62, subj: Cuban Crisis Chronologies.

All directors and key personnel were alerted by the AFAFC commander on 22 October to be ready for any eventuality. A command post was established on 23 October and Operation Minimize was imposed and remained in effect until 30 November. From 1-30 November Detachment 2 furnished five highly skilled teletype operators to Shaw AFB. The entire detachment was on standby alert from 22 October to 29 November. Approximately 3,300 allotment documents created by the recall of Air Force reserves were received. Impact on AFAFC during the Cuban crisis was not great, and indicated that the command was geared to accept emergencies.

*TWX, AFAFC to Hq USAF, I-62C-683, 5 Dec 62.

AERONAUTICAL CHART AND INFORMATION CENTER*

During the crisis, to meet the urgent needs of DOD elements for air navigation and planning charts, air target materials and flight information publications, ACIC's military and civilian personnel worked around the clock. The center distributed 307,000 copies of charts and publications, with an average processing time per request of $1\frac{1}{2}$ days. Some 33,250 manhours were expended to provide AFCIN with 21 air target material series 200 charts covering Cuba. It also duplicated 375,000 exposures of Brass Knob and Blue Moon photography to service SAC, TAC, Army airborne and other units. Fifteen tactical situation display film strips and computer tapes for the 26th Air Division were duplicated for use in deployment of F-106 aircraft. Two scramble and recovery procedures were produced for ADC dispersal bases, and special instrument approach procedures for Opalocka airport were produced for MATS on a crash basis. The total dollar cost of the ACIC effort was approximately \$254,000.

Problem Areas and Lessons Learned

1. Valuable experience was gained during the crisis in developing techniques for being responsive to USAF requirements for cartographic products in any similar contingency. For example, the Center was able to maintain adequate inventories by closely correlating the requisitioning of charts and publications with a concurrent program of replenishing stocks by reprint action. As a result, cartographic materials were being supplied whenever and wherever users required.
2. The most serious problem encountered was the difficulty experienced by the Center in obtaining the necessary photography of Cuba to compile the series 200 charts. For several days the commander of Detachment 1 in Washington was unable to obtain photography through normal channels. Finally, the Center was able to borrow Brass Knob-type photography from SAC on 27 October. It took another five days before Blue Moon photography was made available to ACIC.

*Based on TWX, ACIC to CSAF, ACODC 0401-M, 6 Dec 62.

3. A severe shortage of duplicating film severely hampered the processing of photography requests received by ACIC.

OFFICE OF AEROSPACE RESEARCH

The Office of Aerospace Research reported no significant activity in relation to the Cuban contingency.

USAFSS became involved in the Cuban crisis in June 1962 when the command was directed to deploy a C-130 ACRP (airborne communications reconnaissance platform) aircraft from Europe to MacDill AFB for a five mission operation. The aircraft stayed until 1 August and was replaced by a similar aircraft from the Pacific ACRP effort. In November an advanced ACRP prototype was added after operational tests in Europe. The USAFSS contribution to the ground station effort started in late October when a contingent of operational personnel was integrated into the Navy's operations on Key West. On 10 November USAFSS personnel left Key West and opened a strictly USAF operation on Cudjoe Key. By 3 December the emergency reaction unit (ERU) was manned by nearly 200 personnel and was engaged in immediate support of U.S. forces involved in reconnaissance operations.

Problems and Lessons Learned

1. Lack of an ACRP emergency reaction capability within the U.S. to cover situations in the western hemisphere caused concern. Approval has been received to equip additional ACRP aircraft for both U.S. and overseas operations, but they will not be available for a year or more. Availability of ACRP aircraft in Europe was so critical at the time of the first C-130 deployment to Florida (June 1962) that the airborne mission capability dropped 20 percent immediately. When return of the aircraft was delayed, the European security region said that its operational intelligence loss could possibly reach 50 percent. The capability of the Pacific security region was similarly reduced in August with the transfer of one of its C-130's to the U.S.
2. Although the emergency reaction unit was successfully deployed, and the mission handled adequately, the command needed a greater capability. The fact that one unit already was located in South Viet Nam emphasized this need.

*Based on TWX, Hq USAFSS to CSAF (For AFCHO), COI 5-12-3, 5 Dec 62.

3. Lack of an adequate linguistic capability, present during early phases of USAFSS support of Cuban activities, caused some difficulty in manning. The command previously had no specific requirement for such linguistic capability and was not adequately prepared for it. However, as time progressed, the availability of Spanish-speaking personnel, with both operations and non-operations AFSC's, plus a highly concentrated training and orientation program, solved the problem. The mission did not suffer significantly from this shortage.
4. The only equipment shortcoming concerned secure voice communications. When the site opened at Cudjoe Key, secure voice communications were not available to meet the need for immediate rapid reporting of actions by the collection targets. KW-26 on-line teletype communications were used at the outset.
5. From a purely non-operational standpoint, a news release from Marathon, Fla., where the Cudjoe key personnel were quartered, caused some concern among Washington officials and the USAFSS commander. Information contained in the news story was gained from indirect sources, indicating a requirement for qualified information representatives to be on site in such instances.